

STATE OF WYOMING
DEPARTMENT OF ENVIRONMENTAL QUALITY – AIR QUALITY DIVISION

UNPLANNED FIRE INSTRUCTIONS

To assist the responsible jurisdictional fire authority in filling out and submitting the forms needed to comply with requirements of Wyoming's Smoke Management Program for unplanned fire events, the instructions are provided. A checklist of the requirements specific to unplanned fire events is also included to provide quick reference for users of the Wyoming Smoke Management Program. Should responsible jurisdictional fire authorities need additional information, they should contact the Cheyenne WDEQ-AQD staff. (See WDEQ-AQD Contact Information)

Unplanned Fire Event Requirement Checklist
(> 50 acres)

Prior to managing:	<input type="checkbox"/> Review Smoke Management Educational Materials
When event (suppressed or managed) exceeds 50 acres:	<input type="checkbox"/> Notify the Jurisdictional Fire Authority(ies) <input type="checkbox"/> Notify Population(s) within 10 miles of the burn <input type="checkbox"/> Conduct and document visual monitoring <input type="checkbox"/> If required by WDEQ-AQD, conduct and document ambient air Quality and/or visibility monitoring <input type="checkbox"/> If required by WDEQ-AQD, modify the unplanned fire event under management
After event (suppressed or managed) cessation:	<input type="checkbox"/> By December 31, submit a completed post burn reporting form

Note: Volunteer fire organizations' only requirement is the submittal of the post burn reporting form.

Unplanned Fire Post Burn Reporting Instructions

Submittal of the Post Burn Reporting Form to WDEQ-AQD is required for all unplanned fire events that exceed 50 acres. For all unplanned fire events, both managed and suppressed, the Post Burn Reporting Form is due no later than December 31st.

The WDEQ-AQD, in cooperation with the Wyoming State Forestry Division, will utilize the tracking mechanism that is already in place for fire incident reporting (i.e., Wyoming Fire Incident Reporting System - WFIRS) to satisfy the WDEQ-AQD post burn reporting requirement for non-federal jurisdictional fire authorities, provided that the non-federal jurisdictional fire authority has submitted the WFIRS information to the Wyoming State Fire Marshal's Office.

Explanation: This information will be used to obtain an accurate amount of emissions actually produced, and enable the WDEQ-AQD to develop emissions inventories.

One Post Burn Reporting Form is submitted for each unplanned fire event. A jurisdictional fire authority may have been responsible for several unplanned fire events that exceed 50 acres in a year all geographically separated. Each of these would be considered a separate unplanned fire event, and thus each would require a separate Post Burn Reporting Form.

All information on the Post Burn Reporting Form is required to be filled out, unless otherwise indicated. There may be several options presented; in those cases, choose the appropriate option. This form may be submitted to the WDEQ-AQD by mail, fax, e-mail, or hand delivery.

Following are line-by-line instructions for filling out the Unplanned Fire Post Burn Reporting Form.

Contact Information. Provide information for the primary contact for this unplanned fire event; i.e., responsible jurisdictional fire authority. Give name, address, phone number, and if available, fax and e-mail.

Explanation: This enables the WDEQ-AQD to contact the responsible jurisdictional fire authority if necessary.

Volunteer Fire Organization. Specify if the jurisdictional fire authority responsible for the unplanned fire event was a volunteer fire organization.

Explanation: This information indicates to the WDEQ-AQD to check for compliance with the applicable requirements.

Burn Name. Provide the name of the unplanned fire event.

Explanation: This is to help the WDEQ-AQD identify separate unplanned fire events with the same jurisdictional fire authority.

ID #. Leave the ID number space blank.

Explanation: The ID number will be assigned by the WDEQ-AQD. This number will be unique to an unplanned fire event and will be used to identify and track separate unplanned fire events with the same jurisdictional fire authority.

Location. Provide the name of the county in which the unplanned fire event occurred. If the unplanned fire event overlaps more than one, provide the county in which ignition took place. Provide the average elevation of the unplanned fire event. Provide at least one locator: latitude/longitude in decimal degrees; Universal Transverse Mercator (UTM) including the zone, easting, and northing; or legal including Section, Township, and Range. For latitude/longitude and UTM, please provide the reference datum (e.g., NAD27, NAD83, WGS84). If unable to determine this information, the following internet sites may prove helpful Graphical Locator <http://www.esg.montana.edu/gl/> and TopoZone <http://www.topozone.com/>.

Explanation: This information allows the WDEQ-AQD to plot all unplanned fire events on a map, assisting with the analysis of burning across the state and in a given airshed.

Land Ownership. Specify the appropriate land ownership: federal, state, municipal, or private. For multiple land ownership, designate the primary ownership as 1, secondary as 2, and so on (e.g., state 1, private 2).

Explanation: The land ownership will help WDEQ-AQD characterize burning across the state.

Sensitive Receptors. Specify if there was a population(s) or Nonattainment area(s) within a 10-mile radius of the unplanned fire event, or if there were Class-I areas within 30 miles.

Explanation: Providing this information makes the responsible jurisdictional fire authority aware of the people and places that could have been affected by the unplanned fire event, and indicates to the WDEQ-AQD to check for compliance with the additional protective requirements, that is monitoring and public notification.

Public Information.

Explanation: Providing this information makes the WDEQ-AQD aware of the jurisdictional fire authority(ies) notified and public notification conducted for the unplanned fire event.

Jurisdictional Fire Authority(ies). Provide the name of the jurisdictional fire authority(ies) you notified and the date and time the notification(s) took place. Jurisdictional Fire Authority information is voluntary for volunteer fire organizations.

Public Notification. If a population(s) was within a 10-mile radius of the unplanned fire event, provide the method(s) of public notification that was used and the date(s) on which it took place. Public Notification information is voluntary for volunteer fire organizations.

Management Response. Specify if the appropriate management response for the unplanned fire event was suppression or management to accomplish specific pre-stated management objectives in a pre-defined geographic area (unplanned fire under management). For unplanned fire under management ONLY, specify if the unplanned fire event helped **restore** the land to more healthy conditions, or if it helped **maintain** existing healthy conditions. For clarification of the difference between “restoration” unplanned fire events and “maintenance” unplanned fire events, see the definitions as footnoted below.¹

Explanation: This information helps the WDEQ-AQD characterize burning across the state and indicates to the WDEQ-AQD to check for compliance with the two additional requirements for unplanned fire under management.

Daily Burn Information.

Explanation: This allows the WDEQ-AQD to characterize burn types and sizes in specific time periods across the state as well as accurately as possible the actual emissions produced. It is to the advantage of each responsible jurisdictional fire authority to make the best estimates possible of acreage burned, and fuel loading, as this will drive the amount of emissions estimated.

Date(s). Enter each date(s) (month/day/year) when burning occurred, from ignition to completion.

Vegetation Type(s). For each date, enter the primary vegetation type burned and secondary vegetation type burned, if applicable. A list of vegetation types is provided on the Post Burn Reporting Form. The National Fire Danger Rating System (NFDRS) vegetation types may also be used.

Acres. For each date and primary and/or secondary vegetation type burned, enter blackened acres. Be as accurate as possible and only enter **blackened** acres, that is, the actual areas that burned, not the total unplanned fire event acres.

Loading. For each date and primary and/or secondary vegetation type burned, enter the best estimate of total fuel loading in tons per acre if burning acreage. The National Fire Danger Rating System (NFDRS) fuel loadings may be used.

Air Quality Monitoring. Specify what monitoring was conducted for the unplanned fire event as well as what documentation of the visual monitoring and air quality or visibility monitoring, if applicable, is submitted with the Post Burn Reporting Form. Documentation of visual monitoring includes copies of the Visual Monitoring Log, photos/videos, and/or the Photo / Video Log. Documentation of air quality or visibility monitoring includes the type of monitor, constituents monitored, monitoring methodology, location, monitoring period and resulting data. Air Quality Monitoring information is voluntary for volunteer fire organizations.

Explanation: Providing this information makes the responsible jurisdictional fire authority aware of impacts resulting from the unplanned fire event, and enables the WDEQ-AQD to verify what impacts were monitored by the responsible jurisdictional fire authority.

¹ Maintenance Burns – A prescribed fire or unplanned fire under management, in an ecosystem that is currently in an ecologically functional and fire resilient condition, which is utilized to mimic the natural role of fire.

Restoration Burns – The re-establishment of natural vegetation and fire-resilient condition accomplished through the use of prescribed fire or unplanned fire under management to reduce unwanted and/or unnatural levels of vegetation.

Smoke Management Education. (For Unplanned Fire Under Management ONLY) For review of the WDEQ-AQD educational material, provide the date reviewed. For other training programs, provide the name of the program and the date completed. Smoke Management Education information is voluntary for volunteer fire organizations.

Explanation: By participating in an education program the WDEQ-AQD expects responsible jurisdictional fire authorities to become more aware of the smoke produced, the impacts of the smoke, and the ways to minimize the potential emissions and impacts.

Comments. Provide any other comments that might help clarify or explain other entries.

Signature & Date. If submitting this form via mail or fax, please sign and date the form prior to submittal. If the Unplanned Fire Post Burn Reporting Form is submitted electronically, the electronic signature will be attributed to the sender.

Unplanned Fire Visual Monitoring & Photo / Video Log Instructions

Responsible jurisdictional fire authorities will be required to conduct and document visual monitoring on all unplanned fire events. Documentation of visual monitoring will be provided with the Post Burn Reporting Form and may include copies of the Visual Monitoring Log and/or photos/videos with the accompanying Photo/Video Log.

Explanation: Conducting and documenting visual monitoring makes the responsible jurisdictional fire authority aware of smoke impacts resulting from the unplanned fire event, and enables the responsible jurisdictional fire authority to take corrective action should the monitoring show the need. Providing the documentation with the Post Burn Reporting Form enables the WDEQ-AQD to verify what impacts were monitored by the responsible jurisdictional fire authority.

Visual Monitoring Log

Following are line-by-line instructions for filling out the Visual Monitoring Log.

Burn Name. Provide the name of the unplanned fire event.

Explanation: This is to help the WDEQ-AQD identify separate unplanned fire events with the same jurisdictional fire authority.

ID #. For unplanned fire events, leave the ID number space blank.

Explanation: The ID number will be assigned by the WDEQ-AQD. This number will be unique to an unplanned fire event and will be used to identify and track separate unplanned fire events with the same jurisdictional fire authority.

Observer Name(s). Provide the name of the person(s) making the successive visual observations of the smoke plume characteristics.

Explanation: This enables the WDEQ-AQD to identify the observer(s) if necessary.

Successive Observations.

Explanation: This information provides documentation of the smoke plume characteristics.

Date(s). Enter the date(s) (month/day/year) of each smoke plume observation.

Time of Day. For each date, enter the time of each smoke plume observation.

Smoke Plume Appearance. Enter which Figure (i.e., 1 or 2) on the bottom of the Visual Monitoring Log best represents how the smoke plume appears.

Height of Smoke Plume. Enter the height (in feet) of the smoke plume above the ground.

Direction of Smoke Dispersion. Enter the direction(s) the smoke is dispersing (i.e., the direction the smoke is blowing toward). The direction can be very limited such as “SW” or it may be a range such as “S – E” or it can be “all”.

Residual Smoke Present. If there is any evidence of residual smoke in the area, please enter “yes”. If there is no residual smoke, enter “no”.

Comments. Provide any other comments that might help clarify or explain other entries.

Photo / Video Log

Following are line-by-line instructions for filling out the Photo / Video Log.

Burn Name. Provide the name of the unplanned fire event.

Explanation: This is to help the WDEQ-AQD identify separate unplanned fire events with the same jurisdictional fire authority.

ID #. For unplanned fire events, leave the ID number space blank.

Explanation: The ID number will be assigned by the WDEQ-AQD. This number will be unique to an unplanned fire event and will be used to identify and track separate unplanned fire events with the same jurisdictional fire authority.

Photographer Name(s). Provide the name of the person(s) taking photo and/or video images of the smoke plume.

Explanation: This enables the WDEQ-AQD to identify the photographer(s) if necessary.

Photo / Video Observations.

Explanation: This information provides documentation of the photo and/or video observations of the smoke plume.

Date(s). Enter the date(s) (month/day/year) of each photo and/or video observation.

Time of Day. For each date, enter the time of each photo and/or video plume observation.

Photo. For each photo, enter whether the photo was taken on film or digitally.

Video. For each video, enter whether the video was taken on film or digitally.

Photographer Location. For each photo and/or video, enter the location (i.e., distance and direction) of the photographer in relation to the unplanned fire event (e.g., 600 feet "SW").

Direction of Camera View. For each photo and/or video, enter the direction(s) the camera is pointing toward when the photo and/or video was taken. The direction can be very limited such as "SW" for a photo or it may be a range such as "S – E" for a video.

Comments. Provide any other comments that might help clarify or explain other entries.